

Histone H3 Antibody(N-term)

Purified Rabbit Polyclonal Antibody (Pab) Catalog # AP1051a

Product Information

Application WB, E Primary Accession P84243

Other Accession P61830, P02299, P08898, P02302, P02301, Q6NXT2, A5PK61, Q6PI79, P84245,

P84246, Q71LE2, P84244, P84249, Q6PI20, P84247, Q5E9F8, Q27532, Q9U281, Q10453, P84233, P84228, Q71DI3, Q4QRF4, P84229, P84227, Q6LED0, P68433,

P68431, P68432, Q16695

Reactivity Human

Predicted Bovine, Mouse, Rat, Chicken, Zebrafish, Xenopus, C.Elegans, Drosophila, Pig,

Rabbit, Yeast

HostRabbitClonalityPolyclonalIsotypeRabbit IgGClone NamesRB05807Calculated MW15328Antigen Region1-30

Additional Information

Gene ID 3020;3021

Other Names Histone H33, H3F3A, H3F3

Target/Specificity This Histone H3 antibody is generated from rabbits immunized with a KLH

conjugated synthetic peptide between 1-30 amino acids from the N-terminal

region of human Histone H3.

Dilution WB~~1:1000 E~~Use at an assay dependent concentration.

Format Purified polyclonal antibody supplied in PBS with 0.09% (W/V) sodium azide.

This antibody is purified through a protein A column, followed by peptide

affinity purification.

Storage Maintain refrigerated at 2-8°C for up to 2 weeks. For long term storage store

at -20°C in small aliquots to prevent freeze-thaw cycles.

Precautions Histone H3 Antibody(N-term) is for research use only and not for use in

diagnostic or therapeutic procedures.

Protein Information

Name H3-3A (<u>HGNC:4764</u>)

Synonyms

H3.3A, H3F3, H3F3A

Function

Variant histone H3 which replaces conventional H3 in a wide range of nucleosomes in active genes. Constitutes the predominant form of histone H3 in non-dividing cells and is incorporated into chromatin independently of DNA synthesis. Deposited at sites of nucleosomal displacement throughout transcribed genes, suggesting that it represents an epigenetic imprint of transcriptionally active chromatin. Nucleosomes wrap and compact DNA into chromatin, limiting DNA accessibility to the cellular machineries which require DNA as a template. Histones thereby play a central role in transcription regulation, DNA repair, DNA replication and chromosomal stability. DNA accessibility is regulated via a complex set of post-translational modifications of histones, also called histone code, and nucleosome remodeling.

Cellular Location

Nucleus. Chromosome

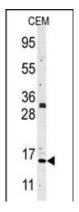
Background

Histones are basic nuclear proteins that are responsible for the nucleosome structure of the chromosomal fiber in eukaryotes. Two molecules of each of the four core histones (H2A, H2B, H3, and H4) form an octamer, around which approximately 146 bp of DNA is wrapped in repeating units, called nucleosomes. The linker histone, H1, interacts with linker DNA between nucleosomes and functions in the compaction of chromatin into higher order structures. The protein targeted by this antibody is a replication-independent member of the histone H3 family.

References

Marzluff, W.F., et al., Genomics 80(5):487-498 (2002). Albig, W., et al., Hum. Genet. 101(3):284-294 (1997). Albig, W., et al., Genomics 40(2):314-322 (1997). Albig, W., et al., Genomics 10(4):940-948 (1991).

Images



Western blot analysis of Histone H3 (N-term) (Cat.#AP1051a) in CEM cell line lysates (35ug/lane). Histone H3(arrow) was detected using the purified Pab.

Please note: All products are 'FOR RESEARCH USE ONLY. NOT FOR USE IN DIAGNOSTIC OR THERAPEUTIC PROCEDURES'.